CLAIMS

1. An adjustable bed comprising:

a laterally tiltable platform;

a tilt mechanism adapted to tilt the platform laterally; and

a load-applying unit adapted to apply, in a state in which the platform is tilted within a predetermined angle range during operation of the tilt mechanism, a load to the platform in a direction that suppresses an expansion of the tilt angle, so as to prevent one of a compression load and a tension load exerted on the tilt mechanism by the platform from reversing to the other load type.

2. The adjustable bed of claim 1, wherein the predetermined angle range includes a tilt angle at which a gravitational center of the platform during the tilt operation traverses a vertical line containing a rotational center of the platform with the load-applying unit in a non-operational state.

3. The adjustable bed of claim 1, wherein the predetermined angle range is from 30 degrees to 90 degrees inclusive, with reference to the platform in a horizontal state.

4. The adjustable bed of claim 1, wherein the load-applying unit is constituted from a tension spring.

5. The adjustable bed of claim 1, wherein

the load-applying unit has a first member and a second member that, in combination, extend in proportion to a slope of the platform, and a compression spring disposed so as to apply a load in a direction that retracts the combination of the first and second members when the slope of the platform reaches a predetermined tilt angle, and

the predetermined tilt angle is an angle immediately prior to an angle at which a rotational moment around a rotational center that acts on the platform, reverses direction due to self weight during the operation of the tilt mechanism.

6. The adjustable bed of claim 5, wherein the load-applying unit includes a compression spring adapted to apply, at a start of the tilting operation, a load in a direction that extends the combination of the first and second members.

7. The adjustable bed of claim 1, wherein

the tilt mechanism includes an elevation unit disposed on either side of the platform, in order to elevate the

platform up and down, and

the platform is tilted laterally by driving one of the elevation units.

8. The adjustable bed of claim 7, wherein

the platform is placed on a support base via a roller disposed on either side of the platform, and

when one side of the platform is raised by the elevation unit corresponding to the side, the roller on the other side rolls over the support base toward the side being raised, and the platform tilts with a center of the roller on the other side as a rotational center.